

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-9 (Canceled).

Claim 10 (Currently Amended): A method for controlling operation of a sensor associated with an exhaust-gas purifying mechanism of an internal combustion engine, comprising:

providing a sensor associated with an exhaust-gas purifying mechanism of an internal combustion engine, said sensor having an output signal;

comparing ~~an~~ the output signal of the sensor with a reference value in a correction assembly; and

utilizing the output signal of the sensor to determine a phase of regeneration of the exhaust-gas purifying mechanism in a detection module;

supplying a signal from the detection module to the correction assembly when the phase of regeneration of the exhaust-gas purifying mechanism is determined; and

acting on the sensor to decrease the difference between the output signal and the reference value based on a correction determined by the correction assembly.

Claim 11 (Previously Presented): A method according to claim 10, wherein the acting on modifies an operating temperature of the sensor.

Claim 12 (Previously Presented): A method according to claim 11, wherein the acting on changes a supply voltage of the sensor from a nominal supply voltage.

Claim 13 (Currently Amended): A method according to claim 10, wherein the output signal of the sensor is acted on as a function of the difference between the output signal of the sensor and the reference value determined during a phase used to determine the final stage of regeneration of the exhaust-gas purifying mechanism in the detection module.

Claim 14 (Previously Presented): A method according to claim 10, wherein the sensor is acted on as a function of the difference between the output signal of the sensor and the reference value determined during a final stage of a phase of regeneration of the purifying mechanism.

Claim 15 (Currently Amended): A method for controlling operation of a sensor associated with an exhaust-gas purifying mechanism of an internal combustion engine, comprising:

comparing an output signal of the sensor with a reference value;

acting on the sensor to decrease the difference between the output signal and the reference value; and

~~A method according to claim 10,~~ wherein a failure of the sensor is detected as a function of the action applied to the sensor to decrease the difference between the output signal and the reference value.

Claim 16 (Currently Amended): A device for controlling operation of a sensor associated with an exhaust-gas purifying mechanism of an internal combustion engine, comprising:

a sensor associated with an exhaust-gas purifying mechanism of an internal combustion engine, said sensor having an output signal;

measuring means for determining a difference between ~~an~~ the output signal of the sensor and a reference value in a correction assembly; and

means for determining a phase of regeneration of the exhaust-gas purifying mechanism in a detection module utilizing the output signal of the sensor;

means for supplying a signal from the detection module to the correction assembly when the phase of regeneration of the exhaust-gas purifying mechanism is determined; and

means for controlling the supply voltage of the sensor as a function of the difference between the output signal of the sensor and the reference value based on a correction determined by the correction assembly.

Claim 17 (Previously Presented): A device according to claim 16, wherein the sensor is an oxygen sensor of all-or-nothing type disposed downstream from a catalytic converter.

Claim 18 (Currently Amended): A device according to claim 16, ~~further comprising:~~  
~~a detection module configured to detect stages of a phase of regeneration of the exhaust-gas purifying mechanism based on a signal delivered by the sensor; and~~  
~~a measuring module configured to determine a difference between~~ wherein the output signal of the sensor is used to determine the ~~and a reference value during a~~ final stage of a regeneration ~~phase~~ of the exhaust-gas purifying mechanism in the detection module.

Claim 19 (New): A device for controlling operation of a sensor associated with an exhaust-gas purifying mechanism of an internal combustion engine, comprising:

a comparator determining a difference between an output signal of the sensor and a reference value;

a controller controlling the supply voltage of the sensor as a function of the difference between the output signal of the sensor and the reference value; and

a detector detecting a failure of the sensor as a function of the action applied to the sensor to decrease the difference between the output signal and the reference value.

IN THE DRAWINGS

The attached two sheets of drawings includes changes to Figs. 1 and 2. These sheets, which includes Figs. 1 and 2, replaces the original sheet including Figs. 1 and 2.

Attachment: Two Replacement Sheets